

12/15/03

PTO/SB/08B (08-03)

Approved for use through 07/31/2008. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Applicant Number	101735974
		Filing Date	
		First Named Inventor	E. K. Ohrliner
		Art Unit	
		Examiner Name	
Sheet 1 of 1	Attorney Docket Number	1318	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
jm	1	YUN, H. M., "Effect of Composition and Microstructure on the Creep & Stress-Rupture Behavior of Tungsten Alloy Wires at 1366-1500 K," Mat.Sci. & Eng. A165, p. 65-74 (1993)	
jm	2	TSAO, B. H. et al, "Fracture-Resistant Ultralloys for Space-Power Applications: Normal-Spectral-Emissivity & Electron-Emission Studies of Tungsten, Rhenium, Hafnium-Carbide Alloys at Elevated Temperatures," Engineering Fracture Mechanics, Vol. 35, No. 6, pp. 1049-1059 (1990)	
jm	3	LUO, A. et al "Hafnium Carbide Strengthening in a Tungsten-Rhenium Matrix at Ultrahigh Temperatures," Acta Metall.Mater. Vol. 40, No. 9, pp. 2225-2232 (1992)	
jm	4	KLOPP, W. D. et al, "Mechanical Properties of Arc-Melted Tungsten-Rhenium-Hafnium-Carbon Alloys," NASA Technical Note NASA TN D-5348, National Aeronautics & Space Administration Washington, D. C., (July 1969)	

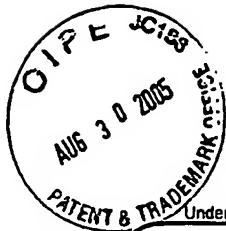
Examiner Signature	<i>jm</i>	Date Considered	10/26/05
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¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449/PTO

**SUPPLEMENTAL
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/735,974
Filing Date	12/15/2003
First Named Inventor	E.K. Ohriner
Art Unit	
Examiner Name	Paula McCray
Attorney Docket Number	1318.0

Sheet 1 of 2

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (If known)			
jm	1	US- 4,728,579	03-01-1988	Konig	
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (If known)				
jm	2	02030774	02-01-1990	K. Yoshihisa		
	3	3002346811	12-04-2002	K. Naohiro		

Examiner Signature		Date Considered	10/26/05
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Application Number	10/735,974
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Examiner Name	Paula McCray
Attorney Docket Number	1318.0

Sheet

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
jm	4	H.M. YUN, "Preliminary Evaluation of Tensile and Stress-Rupture Behavior of W + 24 At. Pct RE + 0.4 At. Pct HfC Wire," Metallurgical Transitions A, 1993, pp. 209-214, Vol 24A.	
jm	5	J.J. PARK, "Formation of Subgrains in tungsten-rhenium-hafnium carbide alloys during creep," J of Materials Science Letters, 1999, pp. 273-275, Vol 18.	
jm	6	W.D. KLOPP, "Mechanical Properties of a Tungsten-23.4 Percent Rhenium-0.27 Percent Hafnium-Carbon Alloy, J Less-Common Metals, 1971, pp. 427-443, Vol. 24.	
jm	7	H.P. GAO, "Effects of rhenium on creep resistance in tungsten alloys," J of Materials Science Letters, 2001, pp. 885-887, Vol. 20.	

Examiner Signature	<i>for M</i>	Date Considered	10/26/05
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